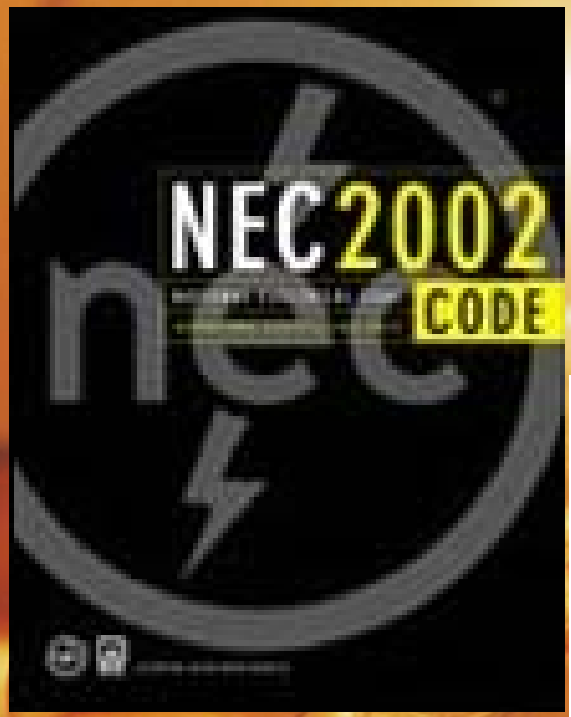
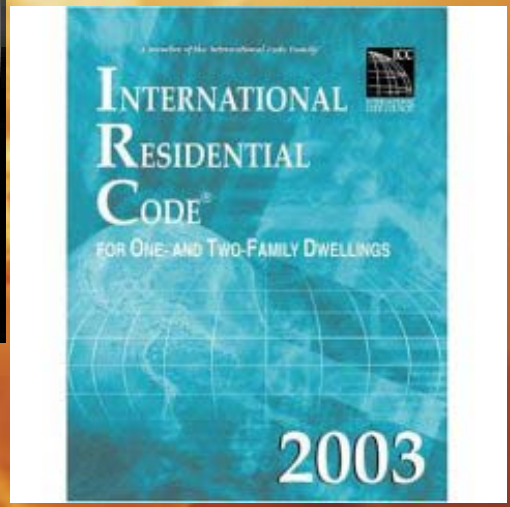
2002 Code Changes





Effective Date

- The 2003 IRC and 2002 NEC will be effective November 16, 2005

Team Members

Chesterfield :

Senior Electrical Inspector :	Stuart Sharpe
Electrical Inspector :	Kirby Rakes
Electrical Inspector :	Robert Hairfield

Hanover :

Senior Electrical Inspector:	Doug Barbour
Electrical Inspector:	Andy Marchetti

Henrico :

Senior Electrical Inspector:	David Humphrey
Electrical Inspector:	Todd Gravatt
Electrical Inspector:	Michael Yohe

Building Officials

- Chesterfield : William Dupler
- Hanover: Richard Bartell
- Henrico: Greg Revels

Housekeeping

- Exits
- Restrooms
- Smoking areas are outside of the building

NEC 200.6
IRC E3307.1

- **Means of Identifying Grounded Conductors.**

  (A) Sizes 6 AWG or Smaller. An insulated grounded conductor of 6 AWG or smaller shall be identified by a continuous white or gray outer finish or by three continuous white stripes on other than green insulation along its entire length. Wires that have their outer covering finished to show a white or gray color but have colored tracer threads in the braid identifying the source of manufacture shall be considered as meeting the provisions of this section.

NEC 210.7(C) – IRC E3902

- **(C) Multiple Branch Circuits.**

  Where more than one branch circuit supplies more than one receptacle on the same yoke, a means to simultaneously disconnect the ungrounded conductors supplying those receptacles shall be provided at the panelboard where the branch circuits originated.

NEC 210.8(A)Exc. #3
IRC E3802.7

A receptacle supplying only a permanently installed fire alarm or burglar alarm shall not be required to have G.F.C.I. protection

NEC 210.12(B)
IRC E3802.11

- **Dwelling Unit Bedrooms.**

  All branch circuits that supply 125-volt, single-phase, 15- and 20-ampere ***outlets*** installed in dwelling unit bedrooms shall be protected by an arc-fault circuit interrupter listed to provide protection of the entire branch circuit.

- **Outlet.**

  A point on the wiring system at which current is taken to supply utilization equipment.

NEC 210.52(C)(5)
IRC E3801.4.5

* Receptacles are now allowed “not more than 20 inches” above the counter tops instead of the 18 inches allowed before.

* Added appliance garages to the list of receptacles not to be counted as the counter top small appliance branch circuits as required by 210.11(C)(1)

NEC 210.52(D)
IRC E3801.6

- **Bathrooms.**

  In dwelling units, at least one wall receptacle outlet shall be installed in bathrooms within 900 mm (3 ft) of the outside edge of each basin. The receptacle outlet shall be located on a wall or partition that is adjacent to the basin or basin countertop.

210.52(D)

NEC 210.52(G)
IRC E3801.9

- **Basements and Garages.**

  Where a portion of the basement is finished into one or more habitable rooms, each separate unfinished portion shall have a receptacle outlet installed in accordance with this section.

NEC 210.63
IRC E3801.11

- **210.63 Heating, Air-Conditioning, and Refrigeration Equipment Outlet.**

  A 125-volt, single-phase, 15- or 20- ampere-rated receptacle shall be at an accessible location for the servicing of HVAC equipment. It shall be located on the same level and within 25 ft of the HVAC equipment. This needs to be a separate circuit independent of the HVAC circuit (s)

NEC 210.70(A)(2)(C)
IRC E3803.1

- Where one or more lighting outlet(s) are installed for interior stairways, there shall be a wall switch at each floor level, and landing level that includes an entry way. If the landing has a door or access to a room (an entry way)

Switch on a landing

285 : New article

- **285.1 Scope.**

  This article covers general requirements, installation requirements, and connection requirements for transient voltage surge suppressors (TVSS) permanently installed on premises wiring systems.

285 : New article

- **285.2 Definition.**

  Transient Voltage Surge Suppressor (TVSS).

  A protective device for limiting transient voltages by diverting or limiting surge current; it also prevents continued flow of follow current while remaining capable of repeating these functions.

NEC 314 : New article IRC E3805

ARTICLE 314

Outlet, Device, Pull, and junction Boxes; Conduit Bodies; Fittings; and Manholes

NEC 314.20
IRC E3806.6

- **In walls or ceilings with a surface** of concrete, tile, gypsum, plaster, or other noncombustible material, boxes shall be installed so that the front edge of the box will not be set back of the finished surface more than1/4 inch.

NEC 314.20
IRC E3806.6

- In walls or ceilings constructed of wood or other combustible surface material, boxes shall be flush with the finished surface or project therefrom.

NEC 314.27(A)
IRC 3904.5

The restriction on the luminaire not exceeding 16” in any dimension has been removed. The restriction of “not more than 6 lbs.” remains.

16” restriction removed

NEC 404.14(E)

- **Dimmer Switches.**

  General-use dimmer switches shall be used only to control permanently installed incandescent luminaires (lighting fixtures) unless listed for the control of other loads and installed accordingly.

NEC 404.15
IRC E3901.1

Marking.

(A) Ratings. Switches shall be marked with the current, voltage, and, if horsepower rated, the maximum rating for which they are designed.

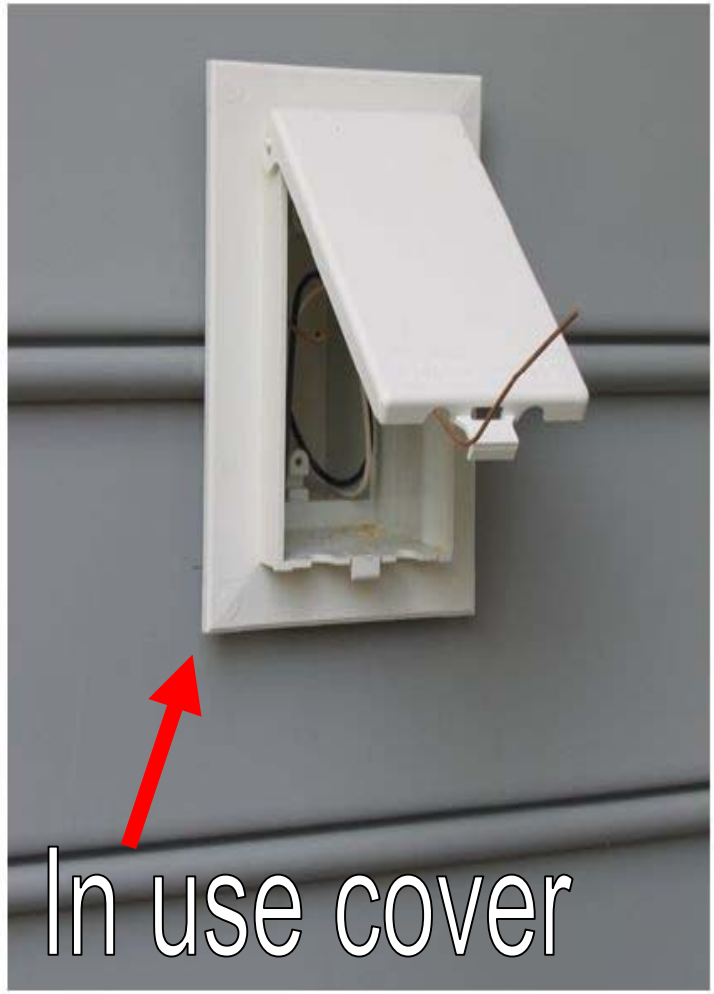
(B) Off Indication. Where in the off position, a switching device with a marked OFF position shall completely disconnect all ungrounded conductors to the load it controls.

NEC Article 406
IRC E3902

- The requirements found in section 210-7 have been relocated to article 406
- This article covers receptacles, cord connectors, and attachment plugs (caps)

NEC 406.8(B)(1)
IRC E3902.9

- All 15- and 20-ampere, 125 volt and 250 volt receptacles installed outdoors in a wet location shall have an enclosure that is weatherproof whether or not the attachment plug cap is inserted



NEC 408.21

Grounded Conductor Terminations.

Each grounded conductor shall terminate within the panelboard in an individual terminal that is not also used for another conductor.

Exception: Grounded conductors of circuits with parallel conductors shall be permitted to terminate in a single terminal if the terminal is identified for connection of more than one conductor.

NEC 410

Luminaires (Lighting Fixtures), Lampholders, and Lamps

This article covers luminaires (lighting fixtures), lampholders, pendants, incandescent filament lamps, arc lamps, electric-discharge lamps, the wiring and equipment forming part of such lamps, luminaires (fixtures), and lighting installations.

IRC E3902

- A complete lighting unit consisting of a lamp or lamps together with the parts designed to distribute the light, to position and protect the lamps and ballast (where applicable), and to connect the lamps to the power supply.
- Fixtures = Luminaire

Luminaire

NEC 410.18(B) exception

Exception:

Replacement luminaires shall be permitted to connect an equipment grounding conductor from the outlet following the provisions about nongrounding receptacle replacement or branch circuit extensions. *The luminaire shall then be grounded by the rules on exposed conductive parts in NEC 250.130(c)*

NEC 424.44(G)
IRC 3802.9

- Bath floor heated GFCI protected

Ground-fault circuit-interrupter protection for personnel shall be provided for electrically heated floors in bathrooms, and in hydromassage bathtub, spa, and hot tub locations.

NEC 440.14

- The disconnecting means shall not be located on panels that are designed to allow access to the air-conditioning or refrigeration equipment.

Questions